

WHAT IS CLAIMED IS:

- 1 1. A die having a cavity for use in a tool set including at least one
2 punch, said die comprising:
3 an anvil having a surface which defines a bottom of the cavity;
4 a plurality of die segments; and
5 a die sleeve disposed circumferentially about the anvil surface and having a
6 plurality of guideways which receive the die segments, wherein the die segments are
7 inwardly spring biased and displaceable outwardly in response to movement of the punch.
- 1 2. A die according to Claim 1, wherein the said die is round and the
2 guideways are formed by cutouts in the die sleeve.
- 1 3. A die according to Claim 1, comprising at least three die segments
2 designed as ring sections.
- 1 4. A die according to Claim 1, wherein the die segments have side
2 faces which extend along secant lines of the supporting surface.
- 1 5. A die according to Claim 1, wherein die segments are arranged on a
2 supporting surface formed by a die base body having the anvil dispersed in its center.
- 1 6. A die according to Claim 5, wherein the die segments each have a
2 radial dimension which is longer than a radial dimension of the supporting surface.
- 1 7. A die according to Claim 1, wherein all the die segments have the
2 same shape.
- 1 8. A die according to Claim 1, wherein the die segments have a
2 circular head piece.
- 1 9. A die according to Claim 8, further comprising annular spring
2 element which circumferentially surrounds the die segments and provides spring biasing.
- 1 10. A die according to Claim 9, wherein the die segments each have a
2 rear groove which disposes in the circumferential direction which receives the annular
3 spring element.

1 11. A die according to Claim 10, wherein the annular spring element
2 comprises an annular spring.

1 12. A die according to Claim 2, wherein the die sleeve has a
2 predeterminable thickness relative to the anvil, this thickness forming a guide length for
3 the die segment guideways.

1 13. A die according to Claim 1, wherein the anvil is cylindrical.

1 14. A die according to Claim 1, wherein the die sleeve has a hole for
2 engagement of a spring-loaded pin for fastening the die to a die holder on a die holder.

1 15. A die according to Claim 1, wherein the die sleeve has a radial hole
2 for engagement of a dog-point headless set screw on the die holder for fastening the die to
3 a die holder.

1 16. A die according to Claim 1, wherein an electric pin projects on the
2 base side on the die base body and can be inserted into a hole of a die holder and can be
3 locked therein, wherein anti-rotation locking webs fix the die at the margin.